

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Penn Aluminum International

Illinois Manufacturing Extension Center

Auto Supplier Uses Lean Concepts to Drive Quality Performance

Client Profile:

Penn Aluminum International manufactures custom aluminum extrusions, tubing and fabricated parts for tier-one automotive suppliers. The company employs 325 people at its facility in Murphysboro, Illinois.

Situation:

Penn Aluminum President Richard Smith learned that all automotive suppliers were being required to register to the ISO/TS 16949:2002 quality performance standard. "The automotive sector wants zero defects, so process control is critical," said Smith. "Our quality management system had been in place for several years, but it was too cumbersome and we weren't getting the results our customers wanted." Previously, Penn had embarked on a comprehensive Lean enterprise initiative to drive cost reductions and boost efficiency utilizing the services of the Illinois Manufacturing Extension Center (IMEC), a NIST MEP network affiliate. Smith surmised that the same techniques used to gain employee input and resolve inefficient production processes could be used to help Penn address the critical challenge of meeting stringent requirements for product quality. The company once again turned to IMEC for assistance.

Solution:

IMEC reviewed and documented current processes, developed new operating procedures, and conducted internal auditor training. IMEC and Penn worked together to deploy Kaizen blitz methodology to simplify the company's process documentation. A cross functional team of ten shop floor and administrative staff re-focused the plan to key on metrics for on-time delivery, internal scrap, and reduction in customer complaints. Using this input, IMEC helped develop a more simplified quality manual and process procedures, enabling shop floor operators to more easily build parts to spec and improve processes before they are documented.

Results:

- * Achieved TS16949 certification.
- * Reduced product defects by 7 percent.
- * Reduced customer complaints by 8.3 percent.

Testimonial:

"As a leader in a company, sometimes you have to open the doors and windows in your plant and let other ideas in. It can be painful to hear the things you need to improve on, but it's necessary to get to the next level."

Richard Smith, President

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